

ductruong

FILE 'HOME' ENTERED AT 14:26:23 ON 16 JUN 2008

FILE 'EPFULL' ENTERED AT 14:26:47 ON 16 JUN 2008
COPYRIGHT (C) 2008 European Patent Office / FIZ Karlsruhe

FILE 'FRFULL' ENTERED AT 14:26:47 ON 16 JUN 2008
COPYRIGHT (C) 2008 Univentio

FILE 'GBFULL' ENTERED AT 14:26:47 ON 16 JUN 2008
COPYRIGHT (C) 2008 Univentio

FILE 'PATDPAFULL' ENTERED AT 14:26:47 ON 16 JUN 2008
COPYRIGHT (C) 2008 DPMA

FILE 'PCTFULL' ENTERED AT 14:26:47 ON 16 JUN 2008
COPYRIGHT (C) 2008 Univentio

FILE 'RDISCLOSURE' ENTERED AT 14:26:47 ON 16 JUN 2008
COPYRIGHT (C) 2008 Kenneth Mason Publications Ltd.

FILE 'USPATFULL' ENTERED AT 14:26:47 ON 16 JUN 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 14:26:47 ON 16 JUN 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 14:26:47 ON 16 JUN 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

```
=> s polymer# and optical device#
      4 FILES SEARCHED...
L1          21324 POLYMER# AND OPTICAL DEVICE#
```

=> S 11 AND (CO-MONOMER# OR COMONOMER#)
L2 1175 L1 AND (CO-MONOMER# OR COMONOMER#)

```
=> s l2 and electroluminescent device#
      3 FILES SEARCHED...
      5 FILES SEARCHED...
L3          120 L2 AND ELECTROLUMINESCENT DEVICE#
```

=> s 13 and pyrimidine#
1.4 36 1.3 AND PYRIMIDINE#

=> s 14 and fluorene#
1.5 34 1.4 AND FLUORENE#

=> s 15 and positive charge carrier# and negative charge carrier#
I.6 5 I.5 AND POSITIVE CHARGE CARRIER# AND NEGATIVE CHARGE CARRIER#

=> d 16 1-5

ductruong

L6 ANSWER 1 OF 5 EPFULL COPYRIGHT 2008 EPO/FIZ KA on STN

AN 2003:147160 EPFULL EDP 20050105 ED 20050105 UP 20050504
DUPD 20050504 DUPW 200518

TIEN Semiconductive Polymers.
TIFR Polymeres semi-conducteurs.
TIDE Halbleitende Polymere.
IN The designation of the inventor has not yet been filed
PA Covion Organic Semiconductors GmbH, (Organic Semiconductors GmbH,
Covion; Semiconductors GmbH, Covion Organic), , 65926 Frankfurt, DE
PAN 3202880
AG Luderschmidt, Schueler & Partner GbR, Patentanwaelte Industriepark
Hoechst, Gebaeude F 821, 65926 Frankfurt, DE
AGN 101414
DT Patent
LAF English
LA English
LAP English
TL German; English; French
PIT EPA1 Application published with search report
PI EP 1491568 A1 20041229
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE
SI SK TR
EXTENSION STATES: AL LT LV MK
AI EP 2003-14042 A 20030623
PRAI EP 2003-14042 A 20030623 *

IC.VER 7
ICM C08G061-02
ICS C07C025-22; H01L051-30; C07C001-20; C07C001-24

L6 ANSWER 2 OF 5 PCTFULL COPYRIGHT 2008 Univentio on STN
AN 2004113412 PCTFULL ED 20050110 EW 200453

TIEN POLYMER
TIFR POLYMERES
IN WALLACE, Paul, 11 Redwing Rise, Royston, Hertfordshire SG8 7XU, GB [GB,
GB];
POUNDS, Thomas, 97 Arbury Road, Cambridge CB4 2JD, GB [GB, GB];
O'DELL, Richard, Jettenstetten 23, 84416 Taufkirchen, DE [GB, DE];
TOWNS, Carl, Crown Cottage, 192 Silver Street, Mountfitchet, Stansted,
Essex CM24 8HB, GB [GB, GB];
McKIERNAN, Mary, 12 Lee Close, Cottenham, GB [GB, GB]
PA COVION ORGANIC SEMICONDUCTORS GMBH, 65926 Frankfurt am Main, DE [DE,
DE], for all designates States except US;
WALLACE, Paul, 11 Redwing Rise, Royston, Hertfordshire SG8 7XU, GB [GB,
GB], for US only;
POUNDS, Thomas, 97 Arbury Road, Cambridge CB4 2JD, GB [GB, GB], for US
only;
O'DELL, Richard, Jettenstetten 23, 84416 Taufkirchen, DE [GB, DE], for
US only;
TOWNS, Carl, Crown Cottage, 192 Silver Street, Mountfitchet, Stansted,
Essex CM24 8HB, GB [GB, GB], for US only;
McKIERNAN, Mary, 12 Lee Close, Cottenham, GB [GB, GB], for US only
AG DOeRR, Klaus, Industriepark Hoechst, Gebaeude F821, 65926 Frankfurt am
Main, DE
LAF English
LA English
DT Patent
PI WO 2004113412 A2 20041229
DS W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR

ductruong

CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID
IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG
MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE
SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM
ZW
W-U: AE AL AM AT AZ BG BR BY BZ CN CO CR CZ DE DK EC EE EG ES
FI GE HU JP KE KG KP KR KZ LS MD MX MZ NI PH PL PT RU SK
SL TJ TR TT UA UG UZ YU
RW (ARIPO): BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC
NL PL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
RW-U (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
PRAI EP 2003-03014042.0 20030623
AI WO 2004-EP6721 A 20040622
ICM C08G061-02

L6 ANSWER 3 OF 5 PCTFULL COPYRIGHT 2008 Univentio on STN
AN 2004039864 PCTFULL ED 20040518 EW 200420
TIEN NOVEL POLYMERS FOR USE IN OPTICAL DEVICES
TIFR NOUVEAUX POLYMERES UTILISES DANS DES DISPOSITIFS OPTIQUES
IN CRAIG, Michael, Robert, Horburgstrasse 2, CH-4057 Basel, GB [CH, CH];
ROGERS, Jonathan, St. Alban-Anlage 63, CH-4052 Basel, CH [US, CH];
SCHAeFER, Thomas, Pruntruterstrasse 5, CH-4053 Basel, CH [DE, CH]
PA CIBA SPECIALTY CHEMICALS HOLDING INC., Klybeckstrasse 141, CH-4057
Basel, CH [CH, CH], for all designates States except US;
CRAIG, Michael, Robert, Horburgstrasse 2, CH-4057 Basel, GB [CH, CH],
for US only;
ROGERS, Jonathan, St. Alban-Anlage 63, CH-4052 Basel, CH [US, CH], for
US only;
SCHAeFER, Thomas, Pruntruterstrasse 5, CH-4053 Basel, CH [DE, CH], for
US only
AG CIBA SPECIALTY CHEMICALS HOLDING INC., Patentabteilung, Klybeckstrasse
141, CH-4057 Basel, CH
LAF English
LA English
DT Patent
PI WO 2004039864 A1 20040513
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL
IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK
SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC
NL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
PRAI GB 2002-0225244.3 20021030
EP 2003-03101113.3 20030423
AI WO 2003-EP11634 A 20031021
ICM C08G073-00
ICS C08G075-00; C08G061-00; C08G061-12; H01L051-00; H01L051-30

L6 ANSWER 4 OF 5 USPATFULL on STN
AN 2006:175566 USPATFULL
TI Polymer
IN O'Dell, Richard, Taufkirchen, GERMANY, FEDERAL REPUBLIC OF

ductruong

Pounds, Thomas, Cambridge, UNITED KINGDOM
Wallace, Paul, Hertfordshire, UNITED KINGDOM
Towns, Carl, Essex, UNITED KINGDOM
McKiernan, Mary, Cambridgeshire, UNITED KINGDOM
PI US 20060149016 A1 20060706
AI US 2004-560861 A1 20040622 (10)
WO 2004-EP6721 20040622
20060307 PCT 371 date
PRAI EP 2003-14042 20030623
DT Utility
FS APPLICATION
LN.CNT 638
INCL INCLM: 528/008.000
NCL NCLM: 528/008.000
NCLS: 257/E51.051
IC IPCI C08G0079-08 [I,A]; C08G0079-00 [I,C*]
IPCR C08G0079-00 [I,C]; C08G0079-08 [I,A]; C07C0001-00 [I,C*];
C07C0001-24 [I,A]; C07C0015-00 [I,C*]; C07C0015-20 [I,A];
C07C0017-00 [I,C*]; C07C0017-12 [I,A]; C07C0017-26 [I,A];
C07C0017-35 [I,A]; C07C0025-00 [I,C*]; C07C0025-22 [I,A];
C07F0005-00 [I,C*]; C07F0005-02 [I,A]; C08G0061-00 [I,C*];
C08G0061-02 [I,A]; C08G0061-10 [I,A]; H01L0051-05 [I,C*];
H01L0051-30 [I,A]; H01L0051-50 [N,C*]; H01L0051-50 [N,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 5 USPATFULL on STN
AN 2006:28730 USPATFULL
TI Novel polymers for use in optical devices
IN Craig, Michael Robert, 250 East 39th Street Apt. 14K, New York, NY,
UNITED STATES 10016
Rogers, Jonathan, White Plains, NY, UNITED STATES
Schafer, Thomas, Basel, SWITZERLAND
PI US 20060025564 A1 20060202
AI US 2003-531779 A1 20031021 (10)
WO 2003-EP11634 20031021
20050419 PCT 371 date
PRAI GB 2002-25244 20021030
EP 2003-101113 20030423
DT Utility
FS APPLICATION
LN.CNT 2055
INCL INCLM: 528/422.000
NCL NCLM: 528/422.000
NCLS: 257/E51.049
IC IPCI C08G0073-00 [I,A]
IPCR C08G0073-00 [I,A]; C08G0061-00 [I,C*]; C08G0061-12 [I,A];
C08G0073-00 [I,C]; C08G0073-06 [I,A]; C09K0011-06 [I,C*];
C09K0011-06 [I,A]; H01L0051-05 [I,C*]; H01L0051-30 [I,A];
H01L0051-50 [N,C*]; H01L0051-50 [N,A]; H05B0033-14 [I,C*];
H05B0033-14 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 15 1-34

L5 ANSWER 1 OF 34 EPFULL COPYRIGHT 2008 EPO/FIZ KA on STN
AN 2007:26409 EPFULL EDP 20071107 ED 20071107 UP 20071107
DUPD 20071107 DUPW 200745

ductruong

TIEN Mono-, oligo- and poly-bis(thienyl)arylenes and their use as charge transport materials.
TIFR Mono-, oligo-, et poly-bis(thienyl)arylenes et leurs utilisations en tant que materiaux de transport de charges.
TIDE Mono-, Oligo- und Poly-bis(thienyl)arylene und ihre Verwendung als Ladungstransportmaterialien.
IN Heeney, Martin, 59 Cedar Road, Southampton SO14 6TQ, GB;
Giles, Mark, 86 Riverdene PlaceBitterne Park, Southampton SO18 1UH, GB;
Tierney, Steven, 8 Compton HouseCarlisle Road, Southampton SO16 4BS, GB;
McCulloch, Iain, 2 Goodacre DriveChandlers Ford, Southampton SO53 4LG,
GB;
Bailey, Clare, 8 Trent RoadMidanbury, SouthamptonHampshire SO18 4PP, GB
PA Merck Patent GmbH, Frankfurter Strasse 250, 64293 Darmstadt, DE
PAN 7257080
DT Patent
LAF English
LA English
LAP English
TL German; English; French
PIT EPA2 Application published without search report
PI EP 1852922 A2 20071107
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE
SI SK TR
AI EP 2007-14556 A 20031107
RLI EP 2003-25516 20031107 EP 1439590 Parent Application
PRAI EP 2002-27102 A 20021204
IPCI H01L0051-30 [I,A]; H01L0027-28 [I,A]; H01B0001-12 [I,A]; H01M0004-60
[I,A]; G03G0005-07 [I,A]; C07D0333-04 [I,A]; C08G0061-12 [I,A];
C09K0019-38 [I,A]
H01L0051-05 [I,C*]; H01L0027-28 [I,C*]; H01B0001-12 [I,C*]; H01M0004-36
[I,C*]; G03G0005-07 [I,C*]; C07D0333-00 [I,C*]; C08G0061-00 [I,C*];
C09K0019-38 [I,C*]
L5 ANSWER 2 OF 34 EPFULL COPYRIGHT 2008 EPO/FIZ KA on STN
AN 2004:90739 EPFULL EDP 20050421 ED 20050421 UP 20070221
DUPD 20070221 DUPW 200708
TIEN Poly(benzodithiophenes).
TIFR polybenzodithiophenes.
TIDE Polybenzodithiophene.
IN Heeney, Martin, 59 Cedar Road, Southampton SO14 6TQ, GB;
Bailey, Clare, 8 Trent Road, MidanburySouthamptonHampshire SO18 4PP, GB;
Tierney, Steven, 33 Bellemoor Road, Southampton SO15 7QW, GB;
Zhang, Weimin, 403 Winchester Road, Southampton SO16 7DE, GB;
McCulloch, Iain, Dr., 2 Goodacre DriveChandlers Ford, Southampton SO53
4LG, GB
PA Merck Patent GmbH, Frankfurter Strasse 250, 64293 Darmstadt, DE
PAN 205224
DT Patent
LAF English
LA English
LAP English
TL German; English; French
PIT EPA1 Application published with search report
PI EP 1524286 A1 20050420
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO
SE SI SK TR
AI EP 2004-22032 A 20040916
PRAI EP 2003-23339 A 20031015

ductruong

IPCI C08G0061-12 [I,A]; C09K0019-38 [I,A]; C07D0495-04 [I,A]
C08G0061-00 [I,C*]; C09K0019-38 [I,C*]; C07D0495-00 [I,C*]

L5 ANSWER 3 OF 34 EPFULL COPYRIGHT 2008 EPO/FIZ KA on STN

AN 2004:67993 EPFULL EDP 20050302 ED 20050302 UP 20080409
DUPD 20080409 DUPW 200815

TIEN Mono-, Oligo- and Polythieno(2,3-b)thiophenes.

TIFR Mono-, Oligo- et Polythieno(2,3-b)thiophenes.

TIDE Mono-, Oligo- und Polythieno(2,3-b)thiophene.

IN Heeney, Martin, 59 Cedar Road, Southampton Hampshire SO14 6TQ, GB;
McCulloch, Iain Dr., 2 Goodacre Drive Chandlers Ford, Southampton
Hampshire SO53 4LG, GB;
Bailey, Clare, 8 Trent Road Midanbury, Southampton Hampshire SO 18 4PP,
GB

PA Merck Patent GmbH, Frankfurter Strasse 250, 64293 Darmstadt, DE
PAN 205224

DT Patent

LAF English

LA English

LAP English

TL German; English; French

PIT EPA1 Application published with search report

PI EP 1510535 A1 20050302

DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO
SE SI SK TR

AI EP 2004-18079 A 20040730

PRAI EP 2003-19501 A 20030828

IPCI C08G0061-12 [I,A]; C07D0495-04 [I,A]
C08G0061-00 [I,C*]; C07D0495-00 [I,C*]

L5 ANSWER 4 OF 34 EPFULL COPYRIGHT 2008 EPO/FIZ KA on STN

AN 2003:147160 EPFULL EDP 20050105 ED 20050105 UP 20050504
DUPD 20050504 DUPW 200518

TIEN Semiconductive Polymers.

TIFR Polymeres semi-conducteurs.

TIDE Halbleitende Polymere.

IN The designation of the inventor has not yet been filed

PA Covion Organic Semiconductors GmbH, (Organic Semiconductors GmbH,
Covion; Semiconductors GmbH, Covion Organic), , 65926 Frankfurt, DE
PAN 3202880

AG Luderschmidt, Schueler & Partner GbR, Patentanwaelte Industriepark
Hoechst, Gebaeude F 821, 65926 Frankfurt, DE

AGN 101414

DT Patent

LAF English

LA English

LAP English

TL German; English; French

PIT EPA1 Application published with search report

PI EP 1491568 A1 20041229

DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE
SI SK TR

EXTENSION STATES: AL LT LV MK

AI EP 2003-14042 A 20030623

PRAI EP 2003-14042 A 20030623 *

IC.VER 7

ICM C08G061-02

ductruong

ICS C07C025-22; H01L051-30; C07C001-20; C07C001-24
L5 ANSWER 5 OF 34 EPFULL COPYRIGHT 2008 EPO/FIZ KA on STN
AN 2003:119860 EPFULL UP 20080215
DUPD 20080213 DUPW 200807
TIEN Mono-, oligo- and poly-bis(thienyl) arylenes and their use as charge transport materials.
TIFR Mono-, oligo- et poly(bisthienyl arylenes) et leur utilisation comme materiaux de transport de charge.
TIDE Mono-, oligo- und poly(bisthienylarylene) und ihre Verwendung als Materialien fuer den Ladungstransport.
IN Heeney, Martin, 59 Cedar Road, Southampton SO14 6TQ, GB;
Giles, Mark, Flat 17, Locksley Court 24-26 Archers Road, Southampton SO15 2LE, GB;
Thierney, Steven, 33 Bellermoor Road, Southampton SO15 7QW, GB;
McCulloch, Iain, 2 Goodacre Road, Southampton SO53 4LG, GB;
Bailey, Clare, 8 Trent Road Midanbury, Southampton Hamshire SO18 4PP, GB
PA Merck Patent GmbH, Frankfurter Strasse 250, 64293 Darmstadt, DE
PAN 205224
DT Patent
LAF English
LA English
LAP English
TL German; English; French
PIT EPA2 Application published without search report
PI EP 1439590 A2 20040721
EP 1439590 A3 20050323
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE
SI SK TR
AI EP 2003-25516 A 20031107
RLI EP 2007-14556 20070725 EP 1852922 Divisional Application
PRAI EP 2002-27102 A 20021204
IPCI H01L0051-30 [I,A]; H01B0001-12 [I,A]; H01M0004-60 [I,A]; G03G0005-07
[I,A]; C07C0333-04 [I,A]; C08G0061-12 [I,A]; C09K0019-38 [I,A]
H01L0051-05 [I,C*]; H01B0001-12 [I,C*]; H01M0004-36 [I,C*]; G03G0005-07
[I,C*]; C07C0333-00 [I,C*]; C08G0061-00 [I,C*]; C09K0019-38 [I,C*]
AN 2003:119860 EPFULL ED 20050323 UP 20050323
DUPD 20050323 DUPW 200512
TIEN Mono-, oligo- and poly-bis(thienyl) arylenes and their use as charge transport materials.
TIFR Mono-, oligo- et poly(bisthienyl arylenes) et leur utilisation comme materiaux de transport de charge.
TIDE Mono-, oligo- und poly(bisthienylarylene) und ihre Verwendung als Materialien fuer den Ladungstransport.
IN Heeney, Martin, 59 Cedar Road, Southampton SO14 6TQ, GB;
Giles, Mark, Flat 17, Locksley Court 24-26 Archers Road, Southampton SO15 2LE, GB;
Thierney, Steven, 33 Bellermoor Road, Southampton SO15 7QW, GB;
McCulloch, Iain, 2 Goodacre Road, Southampton SO53 4LG, GB;
Bailey, Clare, 8 Trent Road Midanbury, Southampton Hamshire SO18 4PP, GB
PA MERCK PATENT GmbH, Frankfurter Strasse 250, 64293 Darmstadt, DE
PAN 205224
DT Patent
LAF English
LA English
LAP English
TL German; English; French

ductruong

PIT EPA3 Separate publication of search report
PI EP 1439590 A3 20050323
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE
SI SK TR
EXTENSION STATES: AL LT LV MK
AI EP 2003-25516 A 20031107
PRAI EP 2002-27102 A 20021204
IC.VER 7
ICM H01L051-30
ICS H01B001-12; H01M004-60; G03G005-07; C07C333-04; C08G061-12; C09K019-38

L5 ANSWER 6 OF 34 EPFULL COPYRIGHT 2008 EPO/FIZ KA on STN

AN 2003:21376 EPFULL UP 20060215
DUPD 20060104 DUPW 200601
TIEN Reactive mesogenic benzodithiophenes.
TIFR Benzodithiophenes mesogeniques reactifs.
TIDE Reaktive mesogene Benzodithiophene.
IN Farrand, Louise, Dr., 3 Gallop Cottages, Blandford Forum, DT11 9ED, GB;
Heeney, Martin, 59 Cedar Road, Southampton SO14 6TQ, GB;
Tierny, Steven, 35 Bellemoor Road, Southampton SO15 7QW, GB;
Giles, Mark, Flat 17, Locksley Court, 24-26 Archers Road, Southampton
SO15 2LE, GB;
Thompson, Marcus, 6 Riverside Place, Fordingbridge, Hampshire SP6 1RR,
GB;
Shkunov, Maxim, 6 Ivy Lodge, 48 Seagarth Lane, Southampton SO16 6SX, GB;
Sparrowe, David, 21a Castlemain Avenue, Southbourne, Bournemouth, Dorset
BH5 5EJ, GB;
McCulloch, Iain, Brookvle Muss Lane, Kings Somborne, Hants SO20 6PE, GB
PA Merck Patent GmbH, Frankfurter Strasse 250, 64293 Darmstadt, DE
PAN 205224
DT Patent
LAF English
LA English
LAP English
TL German; English; French
PIT EPA1 Application published with search report
PI EP 1357163 A1 20031029
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE
SI SK TR
AI EP 2003-6887 A 20030331
PRAI EP 2002-9083 A 20020424
IPCI C09K0019-34 [I,A]; C07D0333-50 [I,A]; C09K0019-38 [I,A]
C09K0019-34 [I,C*]; C07D0333-00 [I,C*]; C09K0019-38 [I,C*]

AN 2003:21376 EPFULL ED 20060602 UP 20080521
DUPD 20080521 DUPW 200821
TIEN Reactive mesogenic benzodithiophenes.
TIFR Benzodithiophenes mesogeniques reactifs.
TIDE Reaktive mesogene Benzodithiophene.
IN Farrand, Louise, Dr., 3 Gallop Cottages, Blandford Forum, DT11 9ED, GB;
Heeney, Martin, 59 Cedar Road, Southampton SO14 6TQ, GB;
Tierny, Steven, 35 Bellemoor Road, Southampton SO15 7QW, GB;
Giles, Mark, Flat 17, Locksley Court, 24-26 Archers Road, Southampton
SO15 2LE, GB;
Thompson, Marcus, 6 Riverside Place, Fordingbridge, Hampshire SP6 1RR,
GB;
Shkunov, Maxim, 6 Ivy Lodge, 48 Seagarth Lane, Southampton SO16 6SX, GB;
Sparrowe, David, 21a Castlemain Avenue, Southbourne, Bournemouth, Dorset

ductruong

BH5 5EJ, GB;
McCulloch, Iain, Brookvale Muss Lane, Kings Somborne, Hants SO20 6PE, GB
PA Merck Patent GmbH, Frankfurter Strasse 250, 64293 Darmstadt, DE
PAN 205224
DT Patent
LAF English
LA English
LAP English
TL German; English; French
PIT EPB1 Granted patent
PI EP 1357163 B1 20060531
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE
SI SK TR
AI EP 2003-6887 A 20030331
PRAI EP 2002-9083 A 20020424
REN DATABASE INSPEC [Online] INSTITUTE OF ELECTRICAL ENGINEERS, STEVENAGE,
GB; KOBAYASHI K ET AL: "Crystal structures and physico-chemical
properties of thiophene-fused TCNQ acceptors and their TTF complexes"
Database accession no. 3379704 XP002244917 & INTERNATIONAL CONFERENCE ON
SCIENCE AND TECHNOLOGY OF SYNTHETIC METALS (ICSM '88), SANTA FE, NM,
USA, 26 JUNE-2 JULY 1988, vol. 27, no. 3-4, pages B309-B314, Synthetic
Metals, 30 Dec. 1988, Switzerland ISSN: 0379-6779;
PATENT ABSTRACTS OF JAPAN vol. 012, no. 372 (C-533), 5 October 1988
(1988-10-05) -& JP 63 122727 A (RICOH CO LTD), 26 May 1988 (1988-05-26)
REP EP 1138713 A
EP 1275651 A
WO 9322397 A
WO 9700600 A
WO 9804544 A
WO 9912989 A
WO 2003006468 A
US 6150668 A
IPCI C09K0019-34 [I,A]; C07D0333-50 [I,A]; C09K0019-38 [I,A]
C09K0019-34 [I,C*]; C07D0333-00 [I,C*]; C09K0019-38 [I,C*]
L5 ANSWER 7 OF 34 EPFULL COPYRIGHT 2008 EPO/FIZ KA on STN
AN 2002:104553 EPFULL
DUPD 20040303 DUPW 200410
TIEN Reactive mesogenic azulenes.
TIFR Azulenes mesogeniques reactifs.
TIDE Reaktive mesogene Azulene.
IN Farrand, Louise, 3 Gallop Cottages, Spetisbury, Blandford Forum, Dorset,
DT11 9ED, GB;
Findlater, Michael, 2 Castle Way, Bargeddie, Glasgow, G69 7QG, GB;
Giles, Mark, Flat 17, Locksley Court, 24-26 Archers Road, Southampton,
SO15 2LE, GB;
Heeney, Martin, 59 Cedar Rd., Southampton, SO14 6TQ, GB;
Tierney, Steven, 35 Bellemoor Road, Southampton SO15 7QW, GB;
Thompson, Marcus, 6, Riverside Place, Fordingbridge, Hampshire, SP6 1RR,
GB;
Shkunov, Maxim, 9 Ivy Lodge, 48 Seagarth Lane, Southampton, SO16 6SX,
GB;
Sparrowe, David, 21a Castlemain Avenue, Southbourne, Bournemouth,
Dorset, BH6 5EJ, GB;
McCulloch, Iain, Brookvale Muss Lane, Kings Somborne, Hampshire, SO20
6PE, GB
PA MERCK PATENT GmbH, Frankfurter Strasse 250, 64293 Darmstadt, DE
PAN 205224

ductruong

DT Patent
LAF English
LA English
LAP English
TL German; English; French
PIT EPA1 Application published with search report
PI EP 1318185 A1 20030611
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR
AI EP 2002-25130 A 20021109
PRAI EP 2001-129217 A 20011210
IC.VER 7
ICM C09K019-32

AN 2002:104553 EPFULL ED 20050216 UP 20070516
DUPD 20070516 DUPW 200720
TIEN Reactive mesogenic azulenes.
TIFR Azulenes mesogeniques reactifs.
TIDE Reaktive mesogene Azulene.
IN Farrand, Louise, 3 Gallop Cottages, Spetisbury, Blandford Forum, Dorset,
DT11 9ED, GB;
Findlater, Michael, 2 Castle Way, Bargeddie, Glasgow, G69 7QG, GB;
Giles, Mark, Flat 17, Locksley Court, 24-26 Archers Road, Southampton,
SO15 2LE, GB;
Heeney, Martin, 59 Cedar Rd., Southampton, SO14 6TQ, GB;
Tierney, Steven, 35 Bellemoor Road, Southampton SO15 7QW, GB;
Thompson, Marcus, 6, Riverside Place, Fordingbridge, Hampshire, SP6 1RR,
GB;
Shkunov, Maxim, 9 Ivy Lodge, 48 Seagarth Lane, Southampton, SO16 6SX, GB;
Sparrowe, David, 21a Castlemain Avenue, Southbourne, Bournemouth, Dorset,
BH6 5EJ, GB;
McCulloch, Iain, Brookvale Muss Lane, Kings Somborne, Hampshire, SO20
6PE, GB
PA Merck Patent GmbH, Frankfurter Strasse 250, 64293 Darmstadt, DE
PAN 205224
DT Patent
LAF English
LA English
LAP English
TL German; English; French
PIT EPB1 Granted patent
PI EP 1318185 B1 20050216
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR
AI EP 2002-25130 A 20021109
PRAI EP 2001-129217 A 20011210
REN PATENT ABSTRACTS OF JAPAN vol. 014, no. 250 (C-0723), 29 May 1990
(1990-05-29) -& JP 02 069441 A (MITSUBISHI KASEI CORP), 8 March 1990
(1990-03-08);
PATENT ABSTRACTS OF JAPAN vol. 014, no. 250 (C-0723), 29 May 1990
(1990-05-29) -& JP 02 069437 A (MITSUBISHI KASEI CORP), 8 March 1990
(1990-03-08);
PATENT ABSTRACTS OF JAPAN vol. 015, no. 324 (C-0859), 19 August 1991
(1991-08-19) -& JP 03 122189 A (MITSUBISHI KASEI CORP), 24 May 1991
(1991-05-24);
ESTDALE S E ET AL: "THE AZULENE RING AS A STRUCTURAL ELEMENT IN
LIQUID CRYSTALS" JOURNAL OF MATERIALS CHEMISTRY, THE ROYAL SOCIETY OF
CHEMISTRY, CAMBRIDGE, GB, vol. 7, no. 3, 1 March 1997 (1997-03-01),
pages 391-401, XP000693112 ISSN: 0959-9428;
PATENT ABSTRACTS OF JAPAN vol. 014, no. 250 (C-0723), 29 May 1990
(1990-05-29) -& JP 02 069439 A (MITSUBISHI KASEI CORP), 8 March 1990

ductruong

(1990-03-08);
PATENT ABSTRACTS OF JAPAN vol. 014, no. 250 (C-0723), 29 May 1990
(1990-05-29) -& JP 02 069438 A (MITSUBISHI KASEI CORP), 8 March 1990
(1990-03-08);
PATENT ABSTRACTS OF JAPAN vol. 009, no. 247 (C-307), 3 October 1985
(1985-10-03) -& JP 60 104180 A (CANON KK), 8 June 1985 (1985-06-08);
WADA E. ET AL: 'Synthesis and Polymerization of Acrylates Containing Azulene Structure' J.POLYM.SCI.,POLYM.CHEM.ED. vol. 16, no. 8, 1978, pages 2085 - 2087

REP EP 187015 A
EP 1256602 A
WO 9700600 A
US 4738908 A

IPCI C09K0019-32 [I,A]
C09K0019-32 [I,C*]

L5 ANSWER 8 OF 34 PCTFULL COPYRIGHT 2008 Univentio on STN
AN 2006041221 PCTFULL ED 20060425 EW 200616
TIEN NEW LUMINESCENT COMPOSITIONS AND THEIR USES
TIFR NOUVELLES COMPOSITIONS LUMINESCENTES ET LEURS UTILISATIONS
IN TSUDA, Yoshihiro;
TAI, Seiji;
NOMURA, Satoyuki;
MARROCCO, Matthew, L., III;
LIANG, Yongchao;
WANG, Li-Sheng;
MOTAMEDI, Farshad, J.;
MORISHITA, Yoshii
PA HITACHI CHEMICAL CO., LTD., 1-1, Nishishinjuku 2-chome, Shinjuku-ku, Tokyo, 1630449, JP;
MAXDEM INCORPORATED, 140 East Arrow Highway, San Dimas, California, 91773, US
AG MIYOSHI, Hidekazu et al., Toranomon Kotohira Tower, 2-8, Toranomon 1-chome, Minato-ku, Tokyo 1050001; 1050001, JP
LAF English
LA English
DT Patent
PI WO 2006041221 A1 20060420
DS W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR
CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID
IL IN IS JP KE KG KM KP KR KZ LC LK LR LS LT LU LV LY MA
MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU
SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC
VN YU ZA ZM ZW
RW (ARIPO): BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT
LU LV MC NL PL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
PRAI US 2004-10966370 20041015
AI WO 2005-JP19352 A 20051014
IPCI C08G0061-10 [N,A]
C08G0061-00 [N,C*]

L5 ANSWER 9 OF 34 PCTFULL COPYRIGHT 2008 Univentio on STN
AN 2005121150 PCTFULL ED 20051228 EW 200551
TIEN POLYMERISABLE THIENO[3,2-b]THIOPHENES
TIFR THIENO[3,2-B]THIOPHENES POLYMERISABLES
IN HEENEY, Martin, 59 Cedar Road, Southampton SO14 6TQ, GB [GB, GB];

ductruong

ZHANG, Weimin, 50 Roselands Garden, Southampton SO16 1QJ, GB [CN, GB];
MCCULLOCH, Iain, 2 Goodacre Drive, Chandlers Ford, Southampton SO53 4LG,
GB [GB, GB]

PA MERCK PATENT GMBH, Frankfurter Strasse 250, 64293 Darmstadt 250, DE [DE,
DE], for all designates States except US;
HEENEY, Martin, 59 Cedar Road, Southampton SO14 6TQ, GB [GB, GB], for US
only;
ZHANG, Weimin, 50 Roselands Garden, Southampton SO16 1QJ, GB [CN, GB],
for US only;
MCCULLOCH, Iain, 2 Goodacre Drive, Chandlers Ford, Southampton SO53 4LG,
GB [GB, GB], for US only

AG MERCK PATENT GMBH, Frankfurter Strasse 250, 64293 Darmstadt, DE

LAF English

LA English

DT Patent

PI WO 2005121150 A1 20051222

DS W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR
CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID
IL IN IS JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MD
MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC
SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN
YU ZA ZM ZW

W-U: AE AL AM AT AZ BG BR BY BZ CN CO CR CZ DE DK EC EE EG ES
FI GE HU JP KE KG KP KR KZ LS MD MX MZ NI PH PL PT RU SK
SL TJ TR TT UA UG UZ YU

RW (ARIPO): BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT
LU MC NL PL PT RO SE SI SK TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

RW-U (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

PRAI EP 2004-04013598.0 20040609

AI WO 2005-EP5292 A 20050513

ICM C07D495-04

ICS C09K019-34; C09K019-38; H01B001-12; H01L051-30; H05B033-00; G03G005-06

L5 ANSWER 10 OF 34 PCTFULL COPYRIGHT 2008 Univentio on STN

AN 2004113412 PCTFULL ED 20050110 EW 200453

TIEN POLYMER

TIFR POLYMERES

IN WALLACE, Paul, 11 Redwing Rise, Royston, Hertfordshire SG8 7XU, GB [GB,
GB];
POUNDS, Thomas, 97 Arbury Road, Cambridge CB4 2JD, GB [GB, GB];
O'DELL, Richard, Jettenstetten 23, 84416 Taufkirchen, DE [GB, DE];
TOWNS, Carl, Crown Cottage, 192 Silver Street, Mountfitchet, Stansted,
Essex CM24 8HB, GB [GB, GB];
McKIERNAN, Mary, 12 Lee Close, Cottenham, GB [GB, GB]

PA COVION ORGANIC SEMICONDUCTORS GMBH, 65926 Frankfurt am Main, DE [DE,
DE], for all designates States except US;
WALLACE, Paul, 11 Redwing Rise, Royston, Hertfordshire SG8 7XU, GB [GB,
GB], for US only;
POUNDS, Thomas, 97 Arbury Road, Cambridge CB4 2JD, GB [GB, GB], for US
only;
O'DELL, Richard, Jettenstetten 23, 84416 Taufkirchen, DE [GB, DE], for
US only;
TOWNS, Carl, Crown Cottage, 192 Silver Street, Mountfitchet, Stansted,
Essex CM24 8HB, GB [GB, GB], for US only;
McKIERNAN, Mary, 12 Lee Close, Cottenham, GB [GB, GB], for US only

AG DOeRR, Klaus, Industriepark Hoechst, Gebaeude F821, 65926 Frankfurt am

ductruong

Main, DE
LAF English
LA English
DT Patent
PI WO 2004113412 A2 20041229
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
W-U: AE AL AM AT AZ BG BR BY BZ CN CO CR CZ DE DK EC EE EG ES FI GE HU JP KE KG KP KR KZ LS MD MX MZ NI PH PL PT RU SK SL TJ TR TT UA UG UZ YU
RW (ARIPO): BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
RW-U (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
PRAI EP 2003-03014042.0 20030623
AI WO 2004-EP6721 A 20040622
ICM C08G061-02

L5 ANSWER 11 OF 34 PCTFULL COPYRIGHT 2008 Univentio on STN
AN 2004102615 PCTFULL ED 20041202 EW 200448
TIEN ELECTROACTIVE POLYMERS
TIFR POLYMERES ELECTROACTIFS
IN ROBERTS, Ralph, R., Post Office Box 33427, Saint Paul, MN 55133-3427,
US;
BENTSEN, James, G., Post Office Box 33427, Saint Paul, MN 55133-3427,
US;
LI, Yingbo, Post Office Box 33427, Saint Paul, MN 55133-3427, US
PA 3M INNOVATIVE PROPERTIES COMPANY, 3M Center, Post Office Box 33427,
Saint Paul, MN 55133-3427, US [US, US]
AG ERSFELD, Dean, A., Office of Intellectual Property Counsel, Post Office
Box 33427, Saint Paul, MN 55133-3427, US
LAF English
LA English
DT Patent
PI WO 2004102615 A2 20041125
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
W-U: AT CZ DE DK EE FI SK
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
PRAI US 2002-10/254,218 20020925
AI WO 2003-US24911 A 20030807
ICM H01L

L5 ANSWER 12 OF 34 PCTFULL COPYRIGHT 2008 Univentio on STN
AN 2004041902 PCTFULL ED 20040527 EW 200421
TIEN POLYMER

ductruong

TIFR POLYMER
IN BURROUGHES, Jeremy, c/o Cambridge Display Technology Limited, Greenwich House, Madingley Rise, Madingley Road, Cambridge, Cambridgeshire CB3 0TX, GB [GB, GB];
FRIEND, Richard, c/o Cambridge Display Technology Limited, Greenwich House, Madingley Rise, Madingley Road, Cambridge, Cambridgeshire CB3 0TX, GB [GB, GB];
FODEN, Clare, c/o Cambridge Display Technology Limited, Greenwich House, Madingley Rise, Madingley Road, Cambridge, Cambridgeshire CB3 0TX, GB [GB, GB]
PA CAMBRIDGE DISPLAY TECHNOLOGY LIMITED, c/o IP Department, Greenwich House, Madingley Rise, Madingley Road, Cambridge, Cambridgeshire CB3 0TX, GB [GB, GB], for all designates States except US;
BURROUGHES, Jeremy, c/o Cambridge Display Technology Limited, Greenwich House, Madingley Rise, Madingley Road, Cambridge, Cambridgeshire CB3 0TX, GB [GB, GB], for US only;
FRIEND, Richard, c/o Cambridge Display Technology Limited, Greenwich House, Madingley Rise, Madingley Road, Cambridge, Cambridgeshire CB3 0TX, GB [GB, GB], for US only;
FODEN, Clare, c/o Cambridge Display Technology Limited, Greenwich House, Madingley Rise, Madingley Road, Cambridge, Cambridgeshire CB3 0TX, GB [GB, GB], for US only
AG SHADE, Matthew, Cambridge Display Technology Limited, Greenwich House, Madingley Rise, Madingley Road, GB
LAF English
LA English
DT Patent
PI WO 2004041902 A2 20040521
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL
IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK
SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
RW (ARIPO): BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC
NL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
PRAI GB 2002-0225869.7 20021106
AI WO 2003-GB4753 A 20031104
ICM C08G061-02
ICS C09K011-06; H01L051-00

L5 ANSWER 13 OF 34 PCTFULL COPYRIGHT 2008 Univentio on STN
AN 2004039864 PCTFULL ED 20040518 EW 200420
TIEN NOVEL POLYMERS FOR USE IN OPTICAL DEVICES
TIFR NOUVEAUX POLYMERES UTILISES DANS DES DISPOSITIFS OPTIQUES
IN CRAIG, Michael, Robert, Horburgstrasse 2, CH-4057 Basel, GB [CH, CH];
ROGERS, Jonathan, St. Alban-Anlage 63, CH-4052 Basel, CH [US, CH];
SCHAeFER, Thomas, Pruntruterstrasse 5, CH-4053 Basel, CH [DE, CH]
PA CIBA SPECIALTY CHEMICALS HOLDING INC., Klybeckstrasse 141, CH-4057
Basel, CH [CH, CH], for all designates States except US;
CRAIG, Michael, Robert, Horburgstrasse 2, CH-4057 Basel, GB [CH, CH],
for US only;
ROGERS, Jonathan, St. Alban-Anlage 63, CH-4052 Basel, CH [US, CH], for
US only;
SCHAeFER, Thomas, Pruntruterstrasse 5, CH-4053 Basel, CH [DE, CH], for
US only
AG CIBA SPECIALTY CHEMICALS HOLDING INC., Patentabteilung, Klybeckstrasse

ductruong

141, CH-4057 Basel, CH
LAF English
LA English
DT Patent
PI WO 2004039864 A1 20040513
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL
IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK
SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC
NL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
PRAI GB 2002-0225244.3 20021030
EP 2003-03101113.3 20030423
AI WO 2003-EP11634 A 20031021
ICM C08G073-00
ICS C08G075-00; C08G061-00; C08G061-12; H01L051-00; H01L051-30

L5 ANSWER 14 OF 34 PCTFULL COPYRIGHT 2008 Univentio on STN
AN 2003089542 PCTFULL ED 20031105 EW 200344
TIEN ELECTROLUMINESCENT MATERIALS AND METHODS OF MANUFACTURE AND USE
TIFR MATIERES ELECTROLUMINESCENTES ET PROCEDES DE PRODUCTION ET D'UTILISATION
IN LI, Yingbo, Post Office Box 33427, Saint Paul, MN 55133-3427, US;
BAETZOLD, John P.,, Post Office Box 33427, Saint Paul, MN 55133-3427,
US;
SPAWN, Terence D.,, Post Office Box 33427, Saint Paul, MN 55133-3427,
US;
ROBERTS, Ralph R.,, Post Office Box 33427, Saint Paul, MN 55133-3427,
US;
BENTSEN, James G.,, Post Office Box 33427, Saint Paul, MN 55133-3427,
US;
STARAL, John S.,, Post Office Box 33427, Saint Paul, MN 55133-3427, US
PA 3M INNOVATIVE PROPERTIES COMPANY, 3M Center, Post Office Box 33427,
Saint Paul, MN 55133-3427, US [US, US]
AG SKOLNICK, Steven E.,, Office of Intellectual Property Counsel, Saint
Paul, MN 55133-3427, US
LAF English
LA English
DT Patent
PI WO 2003089542 A1 20031030
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN
MW MX MZ NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL TJ TM
TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
W-U: AT CZ DE DK EE FI SK
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC
NL PT SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
PRAI US 2002-60/374,044 20020419
US 2002-10/285,114 20021031
AI WO 2003-US6447 A 20030303
ICM C09K011-06
ICS H01L051-30; C08L065-00; C08G061-00

ductruong

L5 ANSWER 15 OF 34 USPATFULL on STN
AN 2007:282160 USPATFULL
TI Polymerisable Thieno[3,2-B]Thiophenes
IN Heeney, Martin, Southampton, UNITED KINGDOM
McCulloch, Iain, Southampton, UNITED KINGDOM
PI US 20070246704 A1 20071025
AI US 2005-570306 A1 20050513 (11)
WO 2005-EP5292 20050513
20061208 PCT 371 date
PRAI EP 2004-13598 20040609
DT Utility
FS APPLICATION
LN.CNT 1520
INCL INCLM: 257/040.000
INCLS: 528/030.000; 549/050.000; 549/058.000
NCL NCLM: 257/040.000
NCLS: 528/030.000; 549/050.000; 549/058.000
IC IPCI C07D0495-04 [I,A]; C07D0495-00 [I,C*]; C09K0019-34 [I,A];
C09K0019-38 [I,A]; G03G0005-06 [I,A]; H01B0001-12 [I,A];
H01L0051-30 [I,A]; H01L0051-05 [I,C*]; H05B0033-00 [I,A]
IPCR C07D0495-00 [I,C]; C07D0495-04 [I,A]; C09K0019-34 [I,C];
C09K0019-38 [I,A]; C09K0019-38 [I,C]; C09K0019-38 [I,A];
C09K0019-40 [I,C*]; C09K0019-40 [I,A]; G03G0005-06 [I,C];
G03G0005-06 [I,A]; H01B0001-12 [I,C]; H01B0001-12 [I,A];
H01L0051-00 [I,C*]; H01L0051-00 [I,A]; H01L0051-05 [I,C];
H01L0051-30 [I,A]; H05B0033-00 [I,C]; H05B0033-00 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 16 OF 34 USPATFULL on STN
AN 2007:271757 USPATFULL
TI ELECTROLUMINESCENT MATERIALS AND METHODS OF MANUFACTURE AND USE
IN Li, Yingbo, Woodbury, MN, UNITED STATES
Baetzold, John P., North St. Paul, MN, UNITED STATES
Spawn, Terence D., West Lakeland Township, MN, UNITED STATES
Roberts, Ralph R., Cottage Grove, MN, UNITED STATES
Bentsen, James G., North St. Paul, MN, UNITED STATES
Staral, John S., Woodbury, MN, UNITED STATES
PA 3M Innovative Properties Company (U.S. corporation)
PI US 20070237983 A1 20071011
AI US 2007-757723 A1 20070604 (11)
RLI Division of Ser. No. US 2002-285114, filed on 31 Oct 2002, GRANTED, Pat.
No. US 7241512
PRAI US 2002-374044P 20020419 (60)
DT Utility
FS APPLICATION
LN.CNT 1973
INCL INCLM: 428/690.000
NCL NCLM: 428/690.000
IC IPCI B32B0009-00 [I,A]
IPCR B32B0009-00 [I,C]; B32B0009-00 [I,A]; H05B0033-10 [I,C*];
H05B0033-10 [I,A]; C08G0061-00 [I,C*]; C08G0061-02 [I,A];
C08G0061-10 [I,A]; C09K0011-06 [I,C*]; C09K0011-06 [I,A];
H01L0051-00 [N,C*]; H01L0051-00 [N,A]; H01L0051-05 [I,C*];
H01L0051-30 [I,A]; H01L0051-50 [I,C*]; H01L0051-50 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 17 OF 34 USPATFULL on STN
AN 2006:267894 USPATFULL

ductruong

TI 9-Aryl and bisayl substituted polyfluorenes
IN Burroughes, Jeremy, Cambridgeshire, UNITED KINGDOM
Friend, Richard H, Cambridgeshire, UNITED KINGDOM
Foden, Clare, Cambridgeshire, UNITED KINGDOM
PI US 20060228576 A1 20061012
AI US 2003-533989 A1 20031104 (10)
WO 2003-GB4753 20031104
20060213 PCT 371 date
PRAI GB 2002-25869 20021106
DT Utility
FS APPLICATION
LN.CNT 461
INCL INCLM: 428/690.000
INCLS: 257/040.000; 257/E51.032; 257/E51.036; 313/504.000; 313/506.000;
428/917.000; 528/394.000; 528/397.000; 528/422.000; 528/423.000
NCL NCLM: 428/690.000
NCLS: 257/040.000; 257/E51.032; 257/E51.036; 257/E51.051; 313/504.000;
313/506.000; 428/917.000; 528/394.000; 528/397.000; 528/422.000;
528/423.000
IC IPCI H01L0051-54 [I,A]; H01L0051-50 [I,C*]; C08G0061-00 [I,A];
C09K0011-06 [I,A]; H05B0033-14 [I,A]
IPCR H01L0051-50 [I,C]; H01L0051-54 [I,A]; C08G0061-00 [I,C];
C08G0061-00 [I,A]; C08G0061-02 [I,A]; C09K0011-06 [I,C];
C09K0011-06 [I,A]; H01L0051-05 [I,C*]; H01L0051-30 [I,A];
H01L0051-50 [N,A]; H05B0033-14 [I,C]; H05B0033-14 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 18 OF 34 USPATFULL on STN
AN 2006:186262 USPATFULL
TI Reactive mesogenic azulenes
IN Farrand, Louise Diane, Spetisbury, UNITED KINGDOM
Findlater, Michael, Glasgow, UNITED KINGDOM
Giles, Mark, Southampton, UNITED KINGDOM
Heeney, Martin, Southampton, UNITED KINGDOM
Tierney, Steven, Southampton, UNITED KINGDOM
Thompson, Marcus, Fordingbridge, UNITED KINGDOM
Shkunov, Maxim, Southampton, UNITED KINGDOM
Sparrowe, David, Southbourne, UNITED KINGDOM
McCulloch, Iain, Kings Somborne, UNITED KINGDOM
PI US 20060157693 A1 20060720
AI US 2006-377567 A1 20060317 (11)
RLI Division of Ser. No. US 2002-314162, filed on 9 Dec 2002, PENDING
PRAI EP 2001-129217 20011210
DT Utility
FS APPLICATION
LN.CNT 1111
INCL INCLM: 257/040.000
INCLS: 549/510.000; 549/554.000; 549/059.000
NCL NCLM: 257/040.000
NCLS: 549/059.000; 549/510.000; 549/554.000
IC IPCI H01L0029-08 [I,A]; H01L0029-02 [I,C*]; C07D0409-02 [I,A];
C07D0409-00 [I,C*]
IPCR C07D0333-00 [I,C*]; C07D0333-06 [I,A]; H01L0029-02 [I,C];
H01L0029-08 [I,A]; C07C0069-00 [I,C*]; C07C0069-007 [I,A];
C07C0069-54 [I,A]; C07D0409-00 [I,C]; C07D0409-02 [I,A];
C09K0019-32 [I,C*]; C09K0019-32 [I,A]; C09K0019-34 [I,C*];
C09K0019-34 [I,A]; H01L0029-66 [I,C*]; H01L0029-786 [I,A];
H01L0051-05 [I,C*]; H01L0051-05 [I,A]; H01L0051-30 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ductruong

L5 ANSWER 19 OF 34 USPATFULL on STN
AN 2006:182702 USPATFULL
TI ELECTROACTIVE POLYMERS
IN Roberts, Ralph R., Cottage Grove, MN, UNITED STATES
Bentsen, James G., North St. Paul, MN, UNITED STATES
Li, Yingbo, Woodbury, MN, UNITED STATES
PA 3M Innovative Properties Company (U.S. corporation)
PI US 20060155106 A1 20060713
AI US 2006-276878 A1 20060317 (11)
RLI Division of Ser. No. US 2002-254218, filed on 25 Sep 2002, PENDING
DT Utility
FS APPLICATION
LN.CNT 3989
INCL INCLM: 528/423.000
INCLS: 528/377.000; 526/280.000; 257/040.000; 428/917.000
NCL NCLM: 528/423.000
NCLS: 257/040.000; 257/E51.049; 257/E51.051; 428/917.000; 526/280.000;
528/377.000
IC IPCI C08G0061-00 [I,A]
IPCR C08G0061-00 [I,A]; B41M0005-26 [I,C*]; B41M0005-382 [N,A];
B41M0005-395 [I,A]; C08G0061-00 [I,C]; C08G0061-02 [I,A];
C08G0061-10 [I,A]; H01L0051-00 [I,C*]; H01L0051-00 [I,A];
H01L0051-05 [I,C*]; H01L0051-30 [I,A]; H01L0051-40 [N,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 20 OF 34 USPATFULL on STN
AN 2006:175566 USPATFULL
TI Polymer
IN O'Dell, Richard, Taufkirchen, GERMANY, FEDERAL REPUBLIC OF
Pounds, Thomas, Cambridge, UNITED KINGDOM
Wallace, Paul, Hertfordshire, UNITED KINGDOM
Towns, Carl, Essex, UNITED KINGDOM
McKiernan, Mary, Cambridgeshire, UNITED KINGDOM
PI US 20060149016 A1 20060706
AI US 2004-560861 A1 20040622 (10)
WO 2004-EP6721 20040622
20060307 PCT 371 date
PRAI EP 2003-14042 20030623
DT Utility
FS APPLICATION
LN.CNT 638
INCL INCLM: 528/008.000
NCL NCLM: 528/008.000
NCLS: 257/E51.051
IC IPCI C08G0079-08 [I,A]; C08G0079-00 [I,C*]
IPCR C08G0079-00 [I,C]; C08G0079-08 [I,A]; C07C0001-00 [I,C*];
C07C0001-24 [I,A]; C07C0015-00 [I,C*]; C07C0015-20 [I,A];
C07C0017-00 [I,C*]; C07C0017-12 [I,A]; C07C0017-26 [I,A];
C07C0017-35 [I,A]; C07C0025-00 [I,C*]; C07C0025-22 [I,A];
C07F0005-00 [I,C*]; C07F0005-02 [I,A]; C08G0061-00 [I,C*];
C08G0061-02 [I,A]; C08G0061-10 [I,A]; H01L0051-05 [I,C*];
H01L0051-30 [I,A]; H01L0051-50 [N,C*]; H01L0051-50 [N,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 21 OF 34 USPATFULL on STN
AN 2006:98779 USPATFULL
TI New luminescent compositions and their uses
IN Morishita, Yoshii, Tsukuba-shi, JAPAN

ductruong

Nomura, Satoyuki, Tsukuba-shi, JAPAN
Tsuda, Yoshihiro, Tsukuba-shi, JAPAN
Tai, Seiji, Tokyo, JAPAN
Marrocco, Matthew L. III, Fontana, CA, UNITED STATES
Motamedi, Farshad J., Claremont, CA, UNITED STATES
Wang, Li-Sheng, Arcadia, CA, UNITED STATES
Liang, Yongchao, Irvine, CA, UNITED STATES
PA HITACHI CHEMICAL CO. LTD., Tokyo, JAPAN (non-U.S. corporation)
MAXDEM INCORPORATED, San Dimas, CA, UNITED STATES (U.S. corporation)
PI US 20060083945 A1 20060420
AI US 2004-966370 A1 20041015 (10)
DT Utility
FS APPLICATION
LN.CNT 4212
INCL INCLM: 428/690.000
INCLS: 428/917.000; 313/504.000; 313/506.000; 257/040.000; 257/431.000;
257/E51.028; 548/257.000; 528/423.000; 528/377.000; 528/380.000;
526/259.000; 526/280.000; 526/284.000
NCL NCLM: 428/690.000
NCLS: 257/040.000; 257/431.000; 257/E51.028; 313/504.000; 313/506.000;
428/917.000; 526/259.000; 526/280.000; 526/284.000; 528/377.000;
528/380.000; 528/423.000; 548/257.000
IC IPCI H01L0051-54 [I,A]; H01L0051-50 [I,C*]; C09K0011-06 [I,A];
H05B0033-14 [I,A]; H01L0051-46 [I,A]; H01L0051-42 [I,C*];
C08G0073-00 [I,A]; C08F0026-06 [I,A]; C08F0026-00 [I,C*];
C07D0249-18 [I,A]; C07D0249-00 [I,C*]
IPCR H01L0051-50 [I,C]; H01L0051-54 [I,A]; C07D0249-00 [I,C];
C07D0249-18 [I,A]; C08F0026-00 [I,C]; C08F0026-06 [I,A];
C08G0073-00 [I,C]; C08G0073-00 [I,A]; C09K0011-06 [I,C];
C09K0011-06 [I,A]; H01L0051-42 [I,C]; H01L0051-46 [I,A];
H05B0033-14 [I,C]; H05B0033-14 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 22 OF 34 USPATFULL on STN
AN 2006:28730 USPATFULL
TI Novel polymers for use in optical devices
IN Craig, Michael Robert, 250 East 39th Street Apt. 14K, New York, NY,
UNITED STATES 10016
Rogers, Jonathan, White Plains, NY, UNITED STATES
Schafer, Thomas, Basel, SWITZERLAND
PI US 20060025564 A1 20060202
AI US 2003-531779 A1 20031021 (10)
WO 2003-EP11634 20031021
20050419 PCT 371 date
PRAI GB 2002-25244 20021030
EP 2003-101113 20030423
DT Utility
FS APPLICATION
LN.CNT 2055
INCL INCLM: 528/422.000
NCL NCLM: 528/422.000
NCLS: 257/E51.049
IC IPCI C08G0073-00 [I,A]
IPCR C08G0073-00 [I,A]; C08G0061-00 [I,C*]; C08G0061-12 [I,A];
C08G0073-00 [I,C]; C08G0073-06 [I,A]; C09K0011-06 [I,C*];
C09K0011-06 [I,A]; H01L0051-05 [I,C*]; H01L0051-30 [I,A];
H01L0051-50 [N,C*]; H01L0051-50 [N,A]; H05B0033-14 [I,C*];
H05B0033-14 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ductruong

L5 ANSWER 23 OF 34 USPATFULL on STN
AN 2005:105701 USPATFULL
TI Mono-, oligo-and polythieno[2,3-b]thiophenes
IN Heeney, Martin, Southampton, UNITED KINGDOM
McCulloch, Iain, Southampton, UNITED KINGDOM
Bailey, Clare, Southampton, UNITED KINGDOM
PI US 20050090640 A1 20050428
US 7183418 B2 20070227
AI US 2004-928724 A1 20040830 (10)
PRAI EP 2003-19501 20030828
DT Utility
FS APPLICATION
LN.CNT 1665
INCL INCLM: 528/377.000
INCLS: 205/414.000; 428/690.000
NCL NCLM: 549/050.000; 528/377.000
NCLS: 252/500.000; 359/326.000; 385/143.000; 528/377.000; 205/414.000;
428/690.000
IC [7]
ICM C08G075-00
ICS B32B009-00
IPCI C08G0075-00 [ICM,7]; B32B0009-00 [ICS,7]
IPCI-2 C07D0495-02 [I,A]; C07D0495-00 [I,C*]; H01B0001-00 [I,A];
C08G0075-00 [I,A]; G02B0006-00 [I,A]; G02F0001-35 [I,A]
IPCR C07D0495-00 [I,C]; C07D0495-02 [I,A]; H01L0051-50 [I,C*];
H01L0051-50 [I,A]; C07D0495-04 [I,A]; C08G0061-00 [I,C*];
C08G0061-12 [I,A]; C08G0075-00 [I,C]; C08G0075-00 [I,A];
G02B0006-00 [I,C]; G02B0006-00 [I,A]; G02F0001-35 [I,C];
G02F0001-35 [I,A]; H01B0001-00 [I,C]; H01B0001-00 [I,A];
H01L0029-66 [I,C*]; H01L0029-786 [I,A]; H01L0051-05 [I,C*];
H01L0051-05 [I,A]; H01L0051-30 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 24 OF 34 USPATFULL on STN
AN 2005:96618 USPATFULL
TI Poly(benzodithiophenes)
IN Heeney, Martin, Southampton, UNITED KINGDOM
Bailey, Clare, Midanbury, UNITED KINGDOM
Tierney, Steven, Southampton, UNITED KINGDOM
Zhang, Weimin, Southampton, UNITED KINGDOM
McCulloch, Iain, Chandlers Ford, UNITED KINGDOM
PI US 20050082525 A1 20050421
AI US 2004-963720 A1 20041014 (10)
PRAI EP 2003-23339 20031015
DT Utility
FS APPLICATION
LN.CNT 1198
INCL INCLM: 257/040.000
INCLS: 549/043.000; 526/256.000; 526/280.000; 528/377.000; 428/917.000;
428/001.100; 313/504.000; 252/301.350; 252/500.000
NCL NCLM: 257/040.000
NCLS: 252/301.350; 252/500.000; 313/504.000; 428/001.100; 428/917.000;
526/256.000; 526/280.000; 528/377.000; 549/043.000
IC [7]
ICM H01B001-12
ICS C07D495-04; C08G075-00; C09K011-06; C09K019-04
IPCI H01B0001-12 [ICM,7]; C07D0495-04 [ICS,7]; C07D0495-00 [ICS,7,C*];
C08G0075-00 [ICS,7]; C09K0011-06 [ICS,7]; C09K0019-04 [ICS,7]

ductruong

IPCR C07D0333-00 [I,C*]; C07D0333-76 [I,A]; C07D0495-00 [I,C*];
C07D0495-04 [I,A]; C08G0061-00 [I,C*]; C08G0061-12 [I,A];
C09K0019-34 [I,C*]; C09K0019-34 [I,A]; C09K0019-38 [I,C*];
C09K0019-38 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 25 OF 34 USPATFULL on STN
AN 2004:156267 USPATFULL
TI Mono-, oligo- and poly-bis(thienyl) arylenes and their use as charge
transport materials
IN Heeney, Martin, Southampton, UNITED KINGDOM
Giles, Mark, Southampton, UNITED KINGDOM
Tierney, Steven, Southampton, UNITED KINGDOM
McCulloch, Iain, Southampton, UNITED KINGDOM
Bailey, Clare, Hampshire, UNITED KINGDOM
PI US 20040119049 A1 20040624
AI US 2003-725514 A1 20031203 (10)
PRAI EP 2002-27102 20021204
DT Utility
FS APPLICATION
LN.CNT 1100
INCL INCLM: 252/299.300
INCLS: 252/299.610; 252/299.620
NCL NCLM: 252/299.300
NCLS: 252/299.610; 252/299.620; 257/E51.049
IC [7]
ICM C09K019-58
ICS C09K019-32
IPCI C09K0019-58 [ICM, 7]; C09K0019-32 [ICS, 7]
IPCR H01L0051-50 [I,C*]; H01L0051-50 [I,A]; C07D0333-00 [I,C*];
C07D0333-18 [I,A]; C07D0333-28 [I,A]; C08G0061-00 [I,C*];
C08G0061-12 [I,A]; C09K0019-34 [I,C*]; C09K0019-34 [I,A];
C09K0019-38 [I,C*]; C09K0019-38 [I,A]; C09K0019-58 [I,C*];
C09K0019-58 [I,A]; G03G0005-06 [I,C*]; G03G0005-06 [I,A];
G03G0005-07 [I,C*]; G03G0005-07 [I,A]; G11B0007-24 [I,C*];
G11B0007-244 [I,A]; G11B0007-245 [I,A]; H01B0001-12 [I,C*];
H01B0001-12 [I,A]; H01L0029-66 [I,C*]; H01L0029-786 [I,A];
H01L0051-05 [I,C*]; H01L0051-05 [I,A]; H01L0051-30 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 26 OF 34 USPATFULL on STN
AN 2004:82480 USPATFULL
TI Electroactive polymers
IN Roberts, Ralph R., Cottage Grove, MN, UNITED STATES
Bentsen, James G., North St. Paul, MN, UNITED STATES
Li, Yingbo, Woodbury, MN, UNITED STATES
PA 3M Innovative Properties Company (U.S. corporation)
PI US 20040062930 A1 20040401
US 7094902 B2 20060822
AI US 2002-254218 A1 20020925 (10)
DT Utility
FS APPLICATION
LN.CNT 4144
INCL INCLM: 428/411.100
INCLS: 430/200.000; 430/201.000; 430/319.000; 430/271.100; 428/917.000;
528/004.000
NCL NCLM: 548/128.000; 428/411.100
NCLS: 257/E51.049; 257/E51.051; 345/030.000; 345/036.000; 345/045.000;
548/131.000; 548/262.200; 548/269.400; 428/917.000; 430/200.000;

ductruong

430/201.000; 430/271.100; 430/319.000; 528/004.000
IC [7]
ICM G03F007-34
ICS G03F007-11
IPCI G03F0007-34 [ICM, 7]; G03F0007-11 [ICS, 7]
IPCI-2 C07D0249-08 [I,A]; C07D0249-00 [I,C*]; C07D0271-06 [I,A];
C07D0271-00 [I,C*]; C07D0285-08 [I,A]; C07D0285-00 [I,C*];
G09G0003-30 [I,A]
IPCR B41M0005-26 [I,C*]; B41M0005-382 [N,A]; B41M0005-395 [I,A];
C08G0061-00 [I,C*]; C08G0061-02 [I,A]; C08G0061-10 [I,A];
H01L0051-00 [I,C*]; H01L0051-00 [I,A]; H01L0051-05 [I,C*];
H01L0051-30 [I,A]; H01L0051-40 [N,A]; C07D0249-00 [I,C];
C07D0249-08 [I,A]; C07D0271-00 [I,C]; C07D0271-06 [I,A];
C07D0285-00 [I,C]; C07D0285-08 [I,A]; G09G0003-30 [I,C];
G09G0003-30 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 27 OF 34 USPATFULL on STN
AN 2003:318462 USPATFULL
TI Electroluminescent materials and methods of manufacture and use
IN Li, Yingbo, Woodbury, MN, UNITED STATES
Baetzold, John P., North St. Paul, MN, UNITED STATES
Spawn, Terence D., West Lakeland Township, MN, UNITED STATES
Roberts, Ralph R., Cottage Grove, MN, UNITED STATES
Bentsen, James G., North St. Paul, MN, UNITED STATES
Staral, John S., Woodbury, MN, UNITED STATES
PA 3M Innovative Properties Company (U.S. corporation)
PI US 20030224205 A1 20031204
US 7241512 B2 20070710
AI US 2002-285114 A1 20021031 (10)
PRAI US 2002-374044P 20020419 (60)
DT Utility
FS APPLICATION
LN.CNT 2188
INCL INCLM: 428/690.000
INCLS: 428/913.000; 428/917.000; 313/504.000; 257/040.000; 257/103.000;
430/319.000; 252/301.350
NCL NCLM: 428/690.000
NCLS: 252/301.350; 257/040.000; 257/103.000; 313/504.000; 428/917.000;
428/913.000; 430/319.000

IC [7]
ICM C09K011-06
ICS H05B033-14; B32B009-00
IPCI C09K0011-06 [ICM, 7]; H05B0033-14 [ICS, 7]; B32B0009-00 [ICS, 7]
IPCI-2 H01J0001-62 [I,A]; H01J0001-00 [I,C*]; C09K0011-06 [I,A]
IPCR H05B0033-10 [I,C*]; H05B0033-10 [I,A]; C08G0061-00 [I,C*];
C08G0061-02 [I,A]; C08G0061-10 [I,A]; C09K0011-06 [I,C*];
C09K0011-06 [I,A]; H01L0051-00 [N,C*]; H01L0051-00 [N,A];
H01L0051-05 [I,C*]; H01L0051-30 [I,A]; H01L0051-50 [I,C*];
H01L0051-50 [I,A]; H01J0001-00 [I,C]; H01J0001-62 [I,A];
C09K0011-06 [I,C]; C09K0011-06 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 28 OF 34 USPATFULL on STN
AN 2003:298484 USPATFULL
TI Reactive mesogenic benzodithiophenes
IN Farrand, Louise, Blandford Forum, UNITED KINGDOM
Heeney, Martin, Southampton, UNITED KINGDOM
Tierney, Steven, Southampton, UNITED KINGDOM

ductruong

Giles, Mark, Southampton, UNITED KINGDOM
Thompson, Marcus, Hamshire, UNITED KINGDOM
Shkunov, Maxim, Southampton, UNITED KINGDOM
Sparrowe, David, Bournemouth Dorset, UNITED KINGDOM
McCulloch, Iain, Hants, UNITED KINGDOM
PA MERCK PAPENTGESELLSCHAFT MIT BESCHRANKTER HAFTUNG, Darmstadt, GERMANY,
FEDERAL REPUBLIC OF (non-U.S. corporation)
PI US 20030209692 A1 20031113
US 6913710 B2 20050705
AI US 2003-421873 A1 20030424 (10)
PRAI EP 2002-9083 20020424
DT Utility
FS APPLICATION
LN.CNT 1189
INCL INCLM: 252/299.610
INCLS: 252/299.620; 252/299.300; 356/364.000; 345/087.000
NCL NCLM: 252/299.610
NCLS: 252/299.620; 549/043.000; 549/045.000; 549/059.000; 549/083.000;
252/299.300; 345/087.000; 356/364.000
IC [7]
ICM C09K019-38
ICS C09K019-58; C09K019-34; G09G003-36; C09K019-32; G01J004-00
IPCI C09K0019-38 [ICM,7]; C09K0019-58 [ICS,7]; C09K0019-34 [ICS,7];
G09G003-36 [ICS,7]; C09K0019-32 [ICS,7]; G01J0004-00 [ICS,7]
IPCI-2 C09K0019-52 [ICM,7]
IPCR C07D0495-00 [I,C*]; C07D0495-04 [I,A]; C07D0519-00 [I,C*];
C07D0519-00 [I,A]; C08F0020-00 [I,C*]; C08F0020-38 [I,A];
C09K0019-34 [I,C*]; C09K0019-34 [I,A]; C09K0019-38 [I,C*];
C09K0019-38 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 29 OF 34 USPATFULL on STN
AN 2003:242255 USPATFULL
TI Reactive mesogenic azulenes
IN Farrand, Louise Diane, Spetisbury, GERMANY, FEDERAL REPUBLIC OF
Findlater, Michael, Glasgow, UNITED KINGDOM
Giles, Mark, Southampton, UNITED KINGDOM
Heeney, Martin, Southampton, UNITED KINGDOM
Tierney, Steven, Southampton, UNITED KINGDOM
Thompson, Marcus, Fordingbridge, UNITED KINGDOM
Shkunov, Maxim, Southampton, UNITED KINGDOM
Sparrowe, David, Southbourne, UNITED KINGDOM
McCulloch, Iain, Kings Somborne, UNITED KINGDOM
PA Merck Patent Gesellschaft mit beschrankter Haftung, Darmstadt, GERMANY,
FEDERAL REPUBLIC OF (non-U.S. corporation)
PI US 20030168657 A1 20030911
US 7115755 B2 20061003
AI US 2002-314162 A1 20021209 (10)
PRAI EP 2001-129217 20011210
DT Utility
FS APPLICATION
LN.CNT 1035
INCL INCLM: 257/040.000
INCLS: 257/079.000
NCL NCLM: 549/029.000; 257/040.000
NCLS: 257/079.000; 549/510.000; 549/512.000; 558/300.000
IC [7]
ICM H01L027-15
ICS H01L035-24

ductruong

IPCI H01L0027-15 [ICM, 7]; H01L0035-24 [ICS, 7]; H01L0035-12 [ICS, 7,C*]
IPCI-2 C07D0333-02 [I,A]; C07D0333-00 [I,C*]
IPCR C07D0333-00 [I,C]; C07D0333-02 [I,A]; C07D0333-06 [I,A];
C07C0069-00 [I,C*]; C07C0069-007 [I,A]; C07C0069-54 [I,A];
C09K0019-32 [I,C*]; C09K0019-32 [I,A]; C09K0019-34 [I,C*];
C09K0019-34 [I,A]; H01L0029-66 [I,C*]; H01L0029-786 [I,A];
H01L0051-05 [I,C*]; H01L0051-05 [I,A]; H01L0051-30 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 30 OF 34 USPAT2 on STN
AN 2005:105701 USPAT2
TI Mono-, oligo- and polythieno[2,3-b]thiophenes
IN Heeney, Martin, Southampton, UNITED KINGDOM
McCulloch, Iain, Southampton, UNITED KINGDOM
Bailey, Clare, Southampton, UNITED KINGDOM
PA Merck Patent Gesellschaft, Darmstadt, GERMANY, FEDERAL REPUBLIC OF
(non-U.S. corporation)
PI US 7183418 B2 20070227
AI US 2004-928724 20040830 (10)
PRAI EP 2003-19501 20030828
DT Utility
FS GRANTED
LN.CNT 1685
INCL INCLM: 549/050.000
INCLS: 252/500.000; 528/377.000; 385/143.000; 359/326.000
NCL NCLM: 549/050.000; 528/377.000
NCLS: 252/500.000; 359/326.000; 385/143.000; 528/377.000; 205/414.000;
428/690.000
IC IPCI C08G0075-00 [ICM, 7]; B32B0009-00 [ICS, 7]
IPCI-2 C07D0495-02 [I,A]; C07D0495-00 [I,C*]; H01B0001-00 [I,A];
C08G0075-00 [I,A]; G02B0006-00 [I,A]; G02F0001-35 [I,A]
IPCR C07D0495-00 [I,C]; C07D0495-02 [I,A]; H01L0051-50 [I,C*];
H01L0051-50 [I,A]; C07D0495-04 [I,A]; C08G0061-00 [I,C*];
C08G0061-12 [I,A]; C08G0075-00 [I,C]; C08G0075-00 [I,A];
G02B0006-00 [I,C]; G02B0006-00 [I,A]; G02F0001-35 [I,C];
G02F0001-35 [I,A]; H01B0001-00 [I,C]; H01B0001-00 [I,A];
H01L0029-66 [I,C*]; H01L0029-786 [I,A]; H01L0051-05 [I,C*];
H01L0051-05 [I,A]; H01L0051-30 [I,A]
EXF 549/50; 252/500; 528/377; 385/143; 359/326
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 31 OF 34 USPAT2 on STN
AN 2004:82480 USPAT2
TI Electroactive polymers
IN Roberts, Ralph R., Cottage Grove, MN, UNITED STATES
Bentsen, James G., North St. Paul, MN, UNITED STATES
Li, Yingbo, Woodbury, MN, UNITED STATES
PA 3M Innovative Properties Company, St. Paul, MN, UNITED STATES (U.S.
corporation)
PI US 7094902 B2 20060822
AI US 2002-254218 20020925 (10)
DT Utility
FS GRANTED
LN.CNT 3906
INCL INCLM: 548/128.000
INCLS: 548/131.000; 548/262.200; 548/269.400; 345/030.000; 345/036.000;
345/045.000
NCL NCLM: 548/128.000; 428/411.100
NCLS: 257/E51.049; 257/E51.051; 345/030.000; 345/036.000; 345/045.000;

ductruong

548/131.000; 548/262.200; 548/269.400; 428/917.000; 430/200.000;
430/201.000; 430/271.100; 430/319.000; 528/004.000
IC IPCI G03F0007-34 [ICM, 7]; G03F0007-11 [ICS, 7]
IPCI-2 C07D0249-08 [I,A]; C07D0249-00 [I,C*]; C07D0271-06 [I,A];
C07D0271-00 [I,C*]; C07D0285-08 [I,A]; C07D0285-00 [I,C*];
G09G0003-30 [I,A]
IPCR B41M0005-26 [I,C*]; B41M0005-382 [N,A]; B41M0005-395 [I,A];
C08G0061-00 [I,C*]; C08G0061-02 [I,A]; C08G0061-10 [I,A];
H01L0051-00 [I,C*]; H01L0051-00 [I,A]; H01L0051-05 [I,C*];
H01L0051-30 [I,A]; H01L0051-40 [N,A]; C07D0249-00 [I,C];
C07D0249-08 [I,A]; C07D0271-00 [I,C]; C07D0271-06 [I,A];
C07D0285-00 [I,C]; C07D0285-08 [I,A]; G09G0003-30 [I,C];
G09G0003-30 [I,A]
EXF 548/131; 548/128; 548/262.2; 548/269.4; 514/364; 345/30; 345/36; 345/45;
345/76

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 32 OF 34 USPAT2 on STN
AN 2003:318462 USPAT2
TI Electroluminescent materials and methods of manufacture and use
IN Li, Yingbo, Woodbury, MN, UNITED STATES
Baetzold, John P., North St. Paul, MN, UNITED STATES
Spawn, Terence D., West Lakeland Township, MN, UNITED STATES
Roberts, Ralph R., Cottage Grove, MN, UNITED STATES
Bentsen, James G., North St. Paul, MN, UNITED STATES
Staral, John S., Woodbury, MN, UNITED STATES
PA 3M Innovative Properties Company, St. Paul, MN, UNITED STATES (U.S.
corporation)
PI US 7241512 B2 20070710
AI US 2002-285114 20021031 (10)
PRAI US 2002-374044P 20020419 (60)
DT Utility
FS GRANTED
LN.CNT 2261
INCL INCLM: 428/690.000
INCLS: 428/917.000; 313/504.000; 257/040.000; 257/103.000; 252/301.350
NCL NCLM: 428/690.000
NCLS: 252/301.350; 257/040.000; 257/103.000; 313/504.000; 428/917.000;
428/913.000; 430/319.000
IC IPCI C09K0011-06 [ICM, 7]; H05B0033-14 [ICS, 7]; B32B0009-00 [ICS, 7]
IPCI-2 H01J0001-62 [I,A]; H01J0001-00 [I,C*]; C09K0011-06 [I,A]
IPCR H05B0033-10 [I,C*]; H05B0033-10 [I,A]; C08G0061-00 [I,C*];
C08G0061-02 [I,A]; C08G0061-10 [I,A]; C09K0011-06 [I,C*];
C09K0011-06 [I,A]; H01L0051-00 [N,C*]; H01L0051-00 [N,A];
H01L0051-05 [I,C*]; H01L0051-30 [I,A]; H01L0051-50 [I,C*];
H01L0051-50 [I,A]; H01J0001-00 [I,C]; H01J0001-62 [I,A];
C09K0011-06 [I,C]; C09K0011-06 [I,A]
EXF 428/690; 428/917; 428/411.1; 313/506; 313/504; 257/40; 257/E51.029;
257/103; 528/4; 430/200; 252/301.16; 252/500; 252/301.35; 525/40
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 33 OF 34 USPAT2 on STN
AN 2003:298484 USPAT2
TI Reactive mesogenic benzodithiophenes
IN Farrand, Louise, Blandford Forum, UNITED KINGDOM
Heeney, Martin, Southampton, UNITED KINGDOM
Tierney, Steven, Southampton, UNITED KINGDOM
Giles, Mark, Southampton, UNITED KINGDOM
Thompson, Marcus, Hampshire, UNITED KINGDOM

ductruong

Shkunov, Maxim, Southampton, UNITED KINGDOM
Sparrowe, David, Bournemouth Dorset, UNITED KINGDOM
McCulloch, Iain, Hants, UNITED KINGDOM
PA Merck Patent GmbH, Darmstadt, GERMANY, FEDERAL REPUBLIC OF (non-U.S.
corporation)
PI US 6913710 B2 20050705
AI US 2003-421873 20030424 (10)
PRAI EP 2002-9083 20020424
DT Utility
FS GRANTED
LN.CNT 1370
INCL INCLM: 252/299.610
INCLS: 252/299.620; 549/043.000; 549/045.000; 549/059.000; 549/083.000
NCL NCLM: 252/299.610
NCLS: 252/299.620; 549/043.000; 549/045.000; 549/059.000; 549/083.000;
252/299.300; 345/087.000; 356/364.000
IC [7]
ICM C09K019-52
IPCI C09K0019-38 [ICM,7]; C09K0019-58 [ICS,7]; C09K0019-34 [ICS,7];
G09G0003-36 [ICS,7]; C09K0019-32 [ICS,7]; G01J0004-00 [ICS,7]
IPCI-2 C09K0019-52 [ICM,7]
IPCR C07D0495-00 [I,C*]; C07D0495-04 [I,A]; C07D0519-00 [I,C*];
C07D0519-00 [I,A]; C08F0020-00 [I,C*]; C08F0020-38 [I,A];
C09K0019-34 [I,C*]; C09K0019-34 [I,A]; C09K0019-38 [I,C*];
C09K0019-38 [I,A]
EXF 549/29-31; 549/41; 549/59; 549/43; 549/83; 549/45; 549/47; 549/48;
428/1.1; 252/299.01; 252/299.2; 252/299.3; 252/299.62; 252/299.61
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 34 OF 34 USPAT2 on STN
AN 2003:242255 USPAT2
TI Reactive mesogenic azulenes
IN Farrand, Louise Diane, Spetisbury, GERMANY, FEDERAL REPUBLIC OF
Findlater, Michael, Glasgow, UNITED KINGDOM
Giles, Mark, Southampton, UNITED KINGDOM
Heeney, Martin, Southampton, UNITED KINGDOM
Tierney, Steven, Southampton, UNITED KINGDOM
Thompson, Marcus, Fordingbridge, UNITED KINGDOM
Shkunov, Maxim, Southampton, UNITED KINGDOM
Sparrowe, David, Southbourne, UNITED KINGDOM
McCulloch, Iain, Kings Somborne, UNITED KINGDOM
PA Merck Patent GmbH, Darmstadt, GERMANY, FEDERAL REPUBLIC OF (non-U.S.
corporation)
PI US 7115755 B2 20061003
AI US 2002-314162 20021209 (10)
PRAI EP 2001-129217 20011210
DT Utility
FS GRANTED
LN.CNT 981
INCL INCLM: 549/029.000
INCLS: 549/510.000; 549/512.000; 558/300.000; 257/079.000
NCL NCLM: 549/029.000; 257/040.000
NCLS: 257/079.000; 549/510.000; 549/512.000; 558/300.000
IC IPCI H01L0027-15 [ICM,7]; H01L0035-24 [ICS,7]; H01L0035-12 [ICS,7,C*]
IPCI-2 C07D0333-02 [I,A]; C07D0333-00 [I,C*]
IPCR C07D0333-00 [I,C]; C07D0333-02 [I,A]; C07D0333-06 [I,A];
C07C0069-00 [I,C*]; C07C0069-007 [I,A]; C07C0069-54 [I,A];
C09K0019-32 [I,C*]; C09K0019-32 [I,A]; C09K0019-34 [I,C*];
C09K0019-34 [I,A]; H01L0029-66 [I,C*]; H01L0029-786 [I,A];

ductruong

H01L0051-05 [I,C*]; H01L0051-05 [I,A]; H01L0051-30 [I,A]

EXF 549/29

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>